

## ABSTRACT

Two output signals ( $O_{1a}$  and  $O_{1b}$ ) of a microphone system (1) depend in different manner on the angle of incidence ( $\phi$ ) of acoustic signals and are divided one by the other (7). A mathematical product of the ratio ( $A_7$ ) and a weighting factor ( $\alpha$ ) is saturated (12) and subtracted from a signal value ( $A$ ) which can be fed into the system. The subtraction remainder is multiplied (13) by that output signal from the microphone system (1) which also generates the denominator signal for the division (7). Depending on the weighting factor ( $\alpha$ ) of the saturation value ( $B$ ) and on the subtraction value ( $A$ ), a desired directional characteristic is implemented between the resultant signal ( $S_{out}$ ) of the said multiplication and the angle of incidence ( $\phi$ ) of acoustic signals impacting the microphone system (1).

Fig. 6.